

SOV/51-7-2-16/34

Infrared Absorption by Thin Layers of Tin Dioxide

above +150° the resistance fell exponentially with increase of temperature. The observed behaviour may be explained by introduction of chlorine ions as impurities in the preparation stage. Such chlorine ions may replace oxygen ions, producing donor levels which can spread out into an impurity band at chlorine-ion densities above 10^{19}cm^{-3} . The author found also that the electrical conductivity of SnO_2 layers may be increased considerably by introducing antimony into the oxide lattice. This is done by adding a small amount of SbCl_3 to SnCl_4 in the preparation stage. In this way layers with a conductivity of 10^3 - $10^4\text{ohm}^{-1}\text{cm}^{-1}$ could be easily produced. The resistance of such layers rises with temperature as in metals and they exhibit considerable absorption in the infrared region. Acknowledgments are made to K.D. Sinel'nikov for suggesting the subject, I.N. Shklyarevskiy and N.A. Vlasenko for their advice and D. Smelov for his help in experiments. There are 4 figures and 11 references, 7 of which are Soviet, 2 English, 1 German and 1 translation from English into Russian.

SUBMITTED: November 11, 1958

Card 3/3

80558

24.7700

24.7600

S/051/60/008/06/019/024

E201/E691

AUTHORS: Miloslavskiy, V.K. and Lyashenko, S.P.

TITLE: Optical and Electrical Properties of Thin Layers of Tin Dioxide

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 6, pp 868-874 (USSR)

ABSTRACT: The paper reports an investigation of the temperature dependences of the Hall constant (Fig 1) and the electrical conductivity (Fig 2) of thin Sb-doped layers of SnO_2 in a wide range of temperatures (200-300°C), of the wavelength dependence of the transmission coefficient between 0.35 and 2.5 μ (Fig 3) and of the optical reflectivity between 1.5 and 6 μ (Fig 4). The samples were prepared by deposition of SnCl_4 with a small amount of SbCl_3 on glass plates which were then heated. Introduction of antimony was found to increase the electrical conductivity and the carrier density (up to 10^{21} cm^{-3}) of SnO_2 layers. The samples used had carrier densities $N = 2 \times 10^{19} - 10^{21} \text{ cm}^{-3}$ (cf. the table on p 870). The optical density per unit thickness of the sample (at $\lambda = 2.5 \mu$) was found to be directly proportional to the electron density N deduced from the Hall e.m.f. (Fig 5). This indicates that absorption in the near infrared region is due to conduction electrons. The authors calculated also the

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S/051/60/008/06/019/024
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Optical and Electrical Properties of Thin Layers of Tin Dioxide

optical constants n and k in the absorption-edge region ($1.7-2.5 \mu$) from the experimental values of the reflectivity and the transmission coefficient and known thicknesses of the samples. A simple relationship between the real part of complex permittivity, ϵ , and the optical constants given by

$$\epsilon = n^2 - k^2 = \epsilon_0 - \frac{4\pi N e^2}{m^* \omega^2} \quad (3)$$

(where e is the electron charge and m^* is the effective carrier mass) was used by the authors to find ϵ . The linear decrease of ϵ with the square of wavelength is shown in Fig 7. Acknowledgments are made to I.N. Shklyarevskiy and N.A. Vlasenko for their advice. There are 7 figures, 1 table and 10 references, of which 5 are Soviet, 1 English, 2 German, 1 Japanese and 1 translation from English into Russian.

SUBMITTED: November 9, 1959

ard 2/2

SHKLYAREVSKIY, I.N.; VLASENKO, N.A.; MILOSLAVSKIY, V.K.; NOSULENKO, N.A.

Value and sign of the phase difference $\Delta\epsilon_p - \delta_s$. Opt. i spektr.
9 no.5:640-643 N '60. (MIRA 13:11)
(Reflection (Optics)) (Metals--Optical properties)

VLASENKO, N.A.; MILOSLAVSKIY, V.K.; SHKLYAREVSKIY, I.N.

Interference of luminescent radiation from sublimate
phosphors. Opt. i spektr. 11 no.3:403-409 S '61. (MIRA 14:9)
(Phosphors) (Luminescence)

MILOSLAVSKIY, V.K.; RANYUK, A.I.

Optical constants of cadmium oxide in the infrared spectra region.
Opt.1 spektr. 11 no.4:536-541 0 '61. (MIRA 14:10)
(Cadmium oxide--Optical properties)

S/051/62/012/006/018/020
E032/E414

AUTHORS: Shklyarevskiy, I.N., Miloslavskiy, V.K.

TITLE: On the magnitude and sign of the phase difference
 $\Delta = \delta_p - \delta_s$

PERIODICAL: Optika i spektroskopiya, v.12, no.6, 1962, 793-795

TEXT: In a previous paper (Opt. i spektr., v.9, 1960, 640) the authors discussed the phase difference $\Delta = \delta_p - \delta_s$ where δ_p and δ_s are the phase shifts of the p and s components of the electric vector at a given angle of incidence of light on the surface of a metal. It was shown that the magnitude and sign of this difference can be unambiguously determined by direct measurements and such measurements have in fact now been carried out. However, N.Ya.Gorban' and I.A.Shaykevich (Opt. i spektr., v.11, 1961, 750) have obtained results which do agree with these conclusions. A further analysis of the Fresnel reflection coefficients is now used to show that the present authors' conclusions reported in the previous paper still hold and that Gorban' and Shaykevich have used an incorrect interpretation.

There are 2 figures.

SUBMITTED: January 12, 1962

Card 1/1

39869

S/051/62/013/002/003/014
E032/E514

24.3300

AUTHORS: Vlasenko, N.A., Miloslavskiy, V.K. and Shklyarevskiy, I.N.

TITLE: On the origin of Brewster and super-position fringes

PERIODICAL: Optika i spektroskopiya, v.13, no.2, 1962, 250-255

TEXT: The conditions necessary for the appearance of Brewster fringes in white light and super-position fringes in monochromatic light are discussed in the general case with allowance for multiple reflections within each plate. The two types of fringes are carefully defined and the differences between them are brought out. In each case an explicit relation is given for the intensity distribution. In the case of Brewster fringes, the corresponding intensity-distribution formula is used to establish a condition for the continuity of the achromatic fringe. In fact the achromatic fringe is continuous (visual observation) provided $t\Delta\gamma > 2.5$, where t is the plate thickness and $\Delta\gamma$ is the wave number difference corresponding to the spectral range employed. The final section is concerned with the analysis of Brewster fringes which are produced when a two-beam interferometer, e.g. the Jamin interferometer, is crossed with a silvered plane-

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On the origin of Brewster and ... S/051/62/013/002/008/014
E032/E514

parallel plate. Analysis of the corresponding intensity distribution shows the presence of several achromatic fringes and it is suggested that these fringes may be useful in speeding up the adjustment of two-beam interferometers. They may also be useful in rapid order counting and the measurement of the thickness of plane-parallel layers. There are 5 figures. ix

SUBMITTED: July 17, 1961

Card 2/2

S/051/63/014/004/013/026
E039/E420

AUTHOR: Miloslavskiy, V.K.

TITLE: The optical properties of thin CdS layers in the spectral region 0.4 to 18 μ

PERIODICAL: Optika i spektroskopiya, v.14, no.4, 1963, 527-531

TEXT: Layers of CdS are prepared by vacuum evaporation from Mo and Ta evaporators. Partial dissociation of CdS occurs when heated near to its sublimation temperature in vacuo. The CdS layers therefore contain a surplus of Cd metal which alters their electron conductivity. This surplus of Cd can be determined chemically. For investigations in the infrared region of the spectrum, layers of CdS, 2 to 3 μ thick, were built up on thin slices of rock salt. The transmission of these layers was measured in the wavelength range 0.4 to 18 μ by means of a MKC-2 (IKS-2) spectrophotometer. Typical results show good transmission in the range 2 to 5 μ while a noticeable absorption occurs at longer wavelengths. This absorption increases with increasing λ and also with increasing conductivity of the sample. In order to elucidate the nature of these observations, the dependence of

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S/051/63/014/004/013/026
E039/E420

The optical properties ...

transmission and conductivity on temperature is determined. The effect of annealing at 350°C on the absorption of CdS in the visible region is also investigated. Typical results are that absorption decreases in the range 500 to 600 mμ and increases in the range 400 to 500 mμ due to changes in the stoichiometry of the samples. There are 4 figures.

SUBMITTED: July 7, 1962

Card 2/2

MILOSLAVSKIY, V.K.

AID Nr. 987-7 11 June

AMPLIFICATION OF MAGNETOOPTICAL EFFECTS (USSR)

Miloslavskiy, V. K. Optika i spektroskopiya, v. 14, no. 4, Apr 1963, 532-536.
S/051/63/014/004/014/026

The principle of multiple-beam interference is considered as a means of amplifying the magnetooptical Faraday and Kerr effects. Because of excessive absorption in the visible portion of the spectrum, semiconductors are regarded as inferior to dielectrics used in conjunction with highly reflective coatings. Interference photofilters filled with a dielectric coated with partially transparent metal were used in an experimental study of the Faraday effect. Filters with a 0.95 reflectivity coefficient can increase the rotation of polarization plane 20 times, permitting the use of much thinner dielectric films to observe the Faraday effect. When polarization ellipticity is accounted for in the Kerr-effect rotation angle, its function of phase difference shows an asymmetry which has been experimentally observed in such specimens as permalloy-oxide, steel-oxide, and steel-quartz-silver. [JA]

Card 1/1

LYASHENKO, S.P.; MILOSLAVSKIY, V.K.

Determining the effective mass in tin dioxide from the optical constants in the infrared region. Fiz. tver. tela 6 no.8:2560-2562 Ag '64. (MIRA 17:11)

1. Khar'kovskiy gosudarstvennyy universitet imeni Gor'kogo.

L 21812-65 EWT(1)/EWT(m)/EPA(w)-2/EEC(t)/EWP(t)/EEC(b)-2/EWP(b) Pub-10
 ESD(gs)/IJP(c) JD
 ACCESSION NR: AP5001549 S/0185/64/009/012/1291/1299

AUTHOR: Lyashenko, S. P.; Myloslavs'kyi, V. K. (Miloslavskiy, V. K.)

TITLE: Optical properties of free electrons in tin dioxide

SOURCE: Ukrayins'kyi fizychnyy zhurnal, v. 9, no. 12, 1964,
 1291-1299

TOPIC TAGS: free electron, free electron property, optical constant,
 free electron concentration, electron mobility, effective mass, ef-
 fective carrier mass

ABSTRACT: The variation of optical constants for wavelengths from
 0.4 to 9 μ on polycrystalline layers of SnO₂ at various concentrations
 of free electrons N has been investigated. N was varied by introdu-
 cing a controlled amount of Sb atoms into SnO₂. It was shown that
 the variation of the optical constants conforms to the theory of free
 electrons derived for isotropic semiconductors. The effective mass
 of carriers in polycrystalline specimens was determined from compari-
 sons of optical measurements and measurements of Hall constants. At

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ACCESSION NR: AP5001549

$N > 10^{20} \text{ cm}^{-3}$, the effective mass ($m^* = 0.3m$) changes very little with concentration. At $N < 10^{20} \text{ cm}^{-3}$, m^* decreases rapidly with the decrease of N . This decrease results from the influence of the additional absorption in the infrared range on the variation of the real part of the dielectric constant ϵ associated with the impurity centers and the optical oscillations of lattice. The contribution to ϵ due to lattice oscillations is small at $N > 4 \times 10^{19} \text{ cm}^{-3}$. At $N > 10^{20} \text{ cm}^{-3}$, the contribution due to quantum transitions between the impurity zone and the conductivity zone is insignificant because of the merging of the two zones. The values obtained for m^* and ν (relaxation frequency) were used to calculate the mobility of the electrons. At $N > 10^{20} \text{ cm}^{-3}$ the mobility was close to the theoretical calculated by the Conwell-Weisskopf formula. A sharp decrease in mobility at $N < 10^{20} \text{ cm}^{-3}$ and a deviation from the theory may be due to the predominance of conductivity in the impurity zone at $N < 10^{20} \text{ cm}^{-3}$. Orig. art. has: 5 figures, 3 formulas, and 1 table.

ASSOCIATION: Kharkivs'kyi derzhuniversytet im. O. M. Gor'kogo (Khar'kov State University)

Card 2/3

ACCESSION NR: AP4011498

S/0051/64/016/001/0151/0153

AUTHOR: Lyashenko, S.P.; Miloslavskiy, V.K.

TITLE: A simple method for determining the thickness and optical constants of semiconductor and dielectric layers

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 151-153

TOPIC TAGS: optical constant, index of refraction, absorption coefficient, transmittance, layer thickness, dielectric layer, dielectric coating, semiconductor layer, semiconductor coating

ABSTRACT: A method is proposed for determining the thickness and the optical constants (the index of refraction n and the absorption coefficient k) of semiconductor and dielectric layers. Whereas conventional procedures are based on either simultaneous measurement of the reflection coefficient R at normal incidence, the transmittance T and independent measurement of the thickness or on comparison of the transmittance (or reflection) for two different thicknesses, the present method is based on measurement of the transmittance T in a wide spectral range. The method can be used in all cases when there is an extensive region wherein n is much greater than k . Formulas are adduced for evaluating n , k and the thickness from the suc-

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ACC.NR: AP4011498

cessive maximum and minimum values of T. By way of illustration the optical constants are computed for an SnO_2 layer on the basis of an experimental T versus λ curve. It is noted that although the accuracy of the proposed method for determining the thickness and optical constants is not as high as that of the conventional interferometric method, it is adequate in many cases. Orig.art.has: 9 formulas, 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 24Mar63

SUB CODE: PH

DATE ACQ: 14Feb64

NR REF SOV: 003

ENCL: 00

OTHER: 001

Card 2/2

MILOSLAVSKIY, V.K.; SHKLYAREVSKIY, I.N.

Further on the appearance of Brewster bands and superposition
bands. Opt. i spektr. 16 no.3:528-529 Mr '64. (MIRA 17:4)

MILOSLAVSKIY, V.K.

Characteristics of the Faraday effect in thin absorbing films. Opt. i
spektr. 17 no.3:413-417 S '64. (MIRA 17:10)

L 34545-65 EWT(1)/EEC(t)/EEC(b)-2 Pi-4 IJP(c)

ACCESSION NR: AP4048751

S/0051/64/017/005/0765/0770

AUTHORS: Shklyarevskiy, I. N.; Miloslavskiy, V. K.; Goloyadova, V. I.

TITLE: Wide-angle interference of light

SOURCE: Optika i spektroskopiya, v. 17, no. 5, 1964, 765-770

TOPIC TAGS: light interference, luminescence, coherent optical propagation

ABSTRACT: A quantitative study was made of interference of luminescence light with an angle $\phi = 180^\circ$ between the interfering beams. Such measurements have become feasible only recently by the availability of modern equipment with which to measure weak radiation. A thin luminescent layer (solution of pyrazoline and polystyrene in an organic solvent) was deposited on a thin mica plate (5--10 μ). After evaporation of the solvent the layer had approximately the same refractive index as the mica. The second side of the mica was covered

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L 34545-65

ACCESSION NR: AP4048751

with a semitransparent layer of silver (reflection coefficient on the mica side about 85% for $\lambda = 550$ nm. The sample was placed in front of the spectroscopy slit and illuminated, as shown in Fig. 1 of the Enclosure by ultraviolet light ($\lambda = 365$ nm). The luminescence propagating along the normal from the sample surface was passed through a monochromator and recorded with a photoelectric set-up using an FEU-29a photomultiplier. A system of interference lines of constant wavelength was produced by the plane-parallel gap comprising the mica and the luminescent layer. The visibility of the interference lines was recorded and compared with calculations based on the plane-wave approximation. The experimental visibility was lower than calculated, owing to non-uniformity of the thickness of the luminescent layer, light scattering by various defects, and other unaccounted for factors. Orig. art. has: 5 figures.

ASSOCIATION: None

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L 34545-65

ACCESSION NR: AP4048751

SUBMITTED: 18Nov63

ENCL: 01

SUB CODE: OP

NR REF SOV: 007

OTHER: 003

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L 34545-65
ACCESSION NR: AP1048751

ENCLOSURE 01

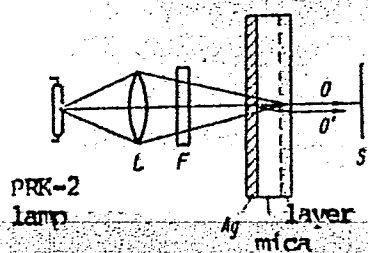


Fig. 1. Schematic arrangement of
illumination system

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L 00679-66 EFF(c)/ENT(m)/EAP(b)/EWP(t) IJP(c) JD

ACCESSION NR: AP5012574

UR/0181/65/007/005/1550/1552

AUTHOR: Miloslavskiy, V. K.; Lyashenko, S. P.

TITLE: Concentration shift of the edge of the intrinsic absorption band in tin dioxide ³¹₃₈ ²⁷

SOURCE: Fizika tverdogo tela, v. 7, no. 5, 1965, 1550-1552

TOPIC TAGS: tin compound, absorption edge, refractive index, light transmission

ABSTRACT: The authors observed and investigated the shift of the intrinsic absorption edge of SnO_2 , the red boundary of which is located at 4 eV. The measurements were made on polycrystalline layers deposited on a quartz substrate. The electron density was varied by introducing antimony atoms. The refractive index ($n = 1.93$) was determined from interferometric transmission curves in the visible region. The width of the forbidden band was 3.97 eV, in fair agreement with data on temperature measurements of the conductivity. The experimental points fit well the theoretical formula for the connection between the shift and the electron density. The value of the reduced effective mass, $\mu = (0.48 \pm 0.02)m$, necessary to reconcile these data with the theory, is close to the value of μ obtained from the spectral variation of the absorption of the sample with the lowest electron density. On the other hand, the value of μ obtained in the present work differs noticeably from

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L 00679-66

ACCESSION NR: AP5012574

the ohmic reffective mass obtained from the spectral variation of the real part of the dielectric constant in an earlier investigation by the authors (FTT v. 6, 2560, 1964). The difference is attributed to anisotropy of the dispersion in the conduction band. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet (Khar'kov State University)

SUBMITTED: 05Nov64

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 003

OTHER: 004

Card 2/2

L 4448-66 EWT(1)/EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EWP(b) IJP(c) JD/GG

ACCESSION NR: AP5017899

UR/0051/65/019/001/0108/0114
535.32 + 535.341

AUTHORS: Lyashenko, S. P.; Miloslavskiy, V. K.

TITLE: Study of the optical properties of tin dioxide thin films in the visible and ultraviolet regions

SOURCE: Optika i spektroskopiya, v. 19, no. 1, 1965, 108-114

TOPIC TAGS: tin compound, optic measurement, optic property, optic spectrum, UV spectrum, absorption edge

ABSTRACT: In view of the appreciable divergence of the results obtained by different authors, apparently owing to the use of different criteria for estimating the edge of the fundamental band, the authors investigated the optical constants of thin SnO₂ films with different carrier densities in the range from 1.1 to 0.23 μ . A thin layer of SnO₂ was deposited on a quartz plate heated to temperature $\geq 500^\circ\text{C}$ by a method described by the authors earlier (Opt. i spektr. 8, 868,

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ACCESSION NR: AP5017899

1960). The transmission and reflection of the samples was measured with a spectrophotometer (SF-4). The optical constants and the thickness of the layer were measured from the interference transmission curves, as described by the authors earlier (Opt. i spektr. v. 16, 80, 1964). A special attachment for the spectrophotometer was used to measure the reflection coefficient at wavelengths shorter than 0.35μ . The results show that for energies greater than 4 eV the absorption is due to the direct allowed interband transitions, and that for lower energies it depends on the lattice imperfections. The frequency dependence of the absorption of strongly doped samples was explained on the basis of the theory of distorted bands. The temperature dependence of the absorption edge was also investigated and it was found that the absorption edge increases linearly with decreasing temperature, at an average rate of 6.5×10^{-4} ev/deg. The actual value of the absorption edge depends on the carrier density, ranging from approximately 3.8 to 4.4 ev at room temperature. The authors thank I. N. Shklyarevskiy and R. G. Yarova for valuable discussions. Orig. art. has: 6 figures and 5 formulas. 44 55

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ACCESSION NR: AP5017899

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ASSOCIATION: None

SUBMITTED: 30Apr64

ENCL: 00

SUB CODE: OP

NR REF SOV: 006

OTHER: 009

CC
Card 3/3

L 17878-66 EWT(1)

ACC NR: AP5027673

SOURCE CODE: UR/0051/65/019/005/0792/0799

AUTHOR: Miloslavskiy, V. K.; Ryazanov, A. N.

ORG: none

TITLE: Multiple-wave interference in a wedge

SOURCE: Optika i spektroskopiya, v. 19, no. 5, 1965, 792-799

TOPIC TAGS: wave mechanics, calculation, light reflection coefficient, light interference, light source

ABSTRACT: Multiple-wave interference from a point source situated near an air wedge was theoretically interpreted by plotting the sequence of imaginary sources formed by multiple reflection from two surfaces of the wedge. The sequence of coherent sources was situated in the main section of the wedge (in the plane perpendicular to the side of the wedge) on the circle passing through the real source and having a center in the side of the wedge. The circle on which the localization of interference fringes was observed passed through the side of the wedge and was tangent to the circle of coherent sources in the point of a true source. It was shown that the conditions of a distinct visibility are controlled

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UDC: 535.412

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ACC NR: AP5027673

by the following inequality: $|2t' \cos \eta_1 - 2t'' \cos \eta_2| \leq \frac{\lambda}{2N}$, where t' and t'' are the wedge thicknesses in the points of intersection of the wedge surface with the ray passing to the point of observation, η_1 and η_2 are angles of incidence, and N is the coefficient of reflection of the wedge surfaces. The linear size of the source can be evaluated from $2\Delta l \cos \eta = 2\epsilon l_x \cos \eta \leq \frac{\lambda}{2N}$ (where η is the average angle of incidence, l_x is the length of the source by the x axis, and ϵ is the wedge angle) provided the source is situated near the wedge and the observation point is sufficiently distant. At $\epsilon \sim 1'$, $\lambda \approx 5 \cdot 10^{-8}$ m, $N = 30$, $\cos \eta = 1$, the $l_x \leq 0.1$ mm. Therefore, the pinpoint aperture (~ 0.1 mm) in a nontransparent screen illuminated by monochromatic light ($\lambda = 5461 \text{ \AA}$; mercury lamp) by using a microcondensor with a small focal point (~ 1 mm.) was used as the light source. The wedge was made of two plane-parallel glass plates covered by well-reflecting, partly transparent layers of silver. The required angle ϵ was obtained by using mica interlayers. The interference pattern was observed under a microscope. The interference pattern was localized on the circle passing through the source. The circle was mobile; its radius and center depended on the angle of the wedge and the distance of the light source from the surface of the wedge. When the observation was made from the side of the apex the circle was displaced closer to the wedge with increased distance of the source from the wedge surface. The interference fringes

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ACC NR: AP5027673

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were best visible at large angles of observation. The experiments confirmed the theoretical conclusions that sufficient visibility of interference is present at $\epsilon \leq \frac{3}{4} N^{-\frac{1}{2} m-1}$; where m is the order of interference, not necessarily an integral number. At $m = 10$ and $N = 50$ the $\epsilon < 3^\circ$; at $N \sim 2$ the $\epsilon < 5^\circ$. Therefore, an increase in the reflection coefficient of mirrors forming the wedge requires a smaller wedge angle to produce distinct visibility. The effect of the order of interference is expressed by the fact that the greatest visibility of the pattern is present at the large angles of observation, where splitting of the narrow Fizeau lines into p- and s- components was observed. The authors thank I. N. Shklyarevskiy and P. G. Yarovaya for a discussion of the results. Orig. art. has: 14 formulas and 3 figures.

SUB CODE: 20/ SUBM DATE: 07Mar64/ ORIG REF: 005/ OTH REF: 008

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L 24265-66 ENT(1)/ENT(m)/END(t) LJP(e) JB/IG
ACC NR: AF6007008 SOURCE CODE: UR/0051/66/020/002/0335/0336

AUTHOR: Miloslavskiy, V. K.; Titova, Ye. I.

ORG: none

TITLE: Observation of the Faraday effect in interference light filters

SOURCE: Optika i spektroskopiya, v. 20, no. 2, 1966, 335-336

TOPIC TAGS: Faraday effect, light filter, optic coating, optic transmission, light reflection, light polarization

ABSTRACT: This is a continuation of an earlier paper (Opt. i spektr. v. 14, 532, 1963) where it was shown that when transmission interference filters are used it is possible to amplify the Faraday effect in a dielectric which forms an integral part of the filter. The present study was devoted to the amplification in the systems Ag-ZnS-Ag and Ag-cryolyte-Ag. The filters were obtained by vacuum evaporation at a pressure $< 10^{-4}$ mm Hg on a glass substrate. The angle of rotation of the plane of polarization was measured in a magnetic field of about 20 kG using a photoelectric spectropolarimeter in the 400-700 nm range. The same apparatus was used to measure the transmission of the filters. The results for the Ag-ZnS-Ag system show that the rotation and transmission angles change periodically with the wavelength, and that the maxima of the rotation and transmission coincide. This agrees with the deduction of the earlier data. Calculation of the amplification coefficient shows that for different filters it ranged from 10 to 18, corresponding to a variation in the reflectivity.

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UDC: 533.417 : 525.345.6

L 24265-66

ACC NR: AF6007008

ty from 82 to 90%, caused by the different conditions under which the filters were prepared. The Ag-cryolyte-Ag system showed no oscillations in the angle of rotation, because of the small value of the Verdet constant for cryolyte in the absence of measured additional rotations caused by the reflection at the dielectric-silver boundary. It is pointed out in conclusion that in the case of filters in which ferromagnetic layers are used for the metallic coatings the rotation of the plane of polarization would be governed by the ferromagnetic layer, because the small rotations in the dielectric can then be neglected. Orig. art. has: 1 figure and 2 formulas.

SUB CODE: 20/ SUBM DATE: 16Apr65/ ORIG REF: 002/ OTH REF: 003

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I. 04793-67 EWT(1)

ACC NR: AP6024464

SOURCE CODE: UR/0181/66/008/007/2054/2061

AUTHOR: Miloslavskiy, V. K.

ORG: Khar'kov State University im. A. M. Gor'kiy (Khar'kovskiy gosudarstvennyy universitet)

TITLE: Quantum absorption in degenerate semiconductors and metals in the case of direct transitions

SOURCE: Fizika tverdogo tela, v. 8, no. 7, 1966, 2054-2061

TOPIC TAGS: quantum resonance phenomenon, absorption spectrum, temperature dependence, absorption edge, metal property

ABSTRACT: The author considers several concrete cases of quantum transitions between partially filled bands and explains the influence of the temperature and of the imperfections on the spectral variation of the absorption at the edge in the case of direct transitions. This is done by analyzing the spectral dependence of the high-frequency conductivity of metals and degenerate semiconductors. A quantum procedure for the calculation of the conductivity is proposed, based on an integral representation of the conductivity in terms of the projection of the matrix element of the momentum and the energy discontinuity at threshold. The proposed calculation scheme explains the square-root dependence of the threshold of absorption in noble metals, previously observed experimentally. Singularities of the absorption, occurring when structural violations occur in the periodicity, are noted in the case when the thresh-

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ACC NR: AP6024464

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old corresponds to a transition to the Fermi level. The author thanks I. N. Shklyarevskiy and R. G. Yarova for supplying experimental data prior to publication and for critical remarks. Orig. art. has: 4 figures and 18 formulas.

SUB CODE: 20/ SUBM DATE: 04Dec65/ ORIG REF: 005/ OTH REF: 009

Card 2/2afs

ACCESSION/NR: AP4043403

S/0181/64/006/008/2560/2562

AUTHORS: Lyashenko, S. P.; Miloslavskiy, V. K.

TITLE: Determination of effective mass in tin dioxide from the optical constants in the infrared region

SOURCE: Fizika tverdogo tela, v. 6; no. 8, 1964, 2560-2562

TOPIC TAGS: tin oxide optical constant, ir optical absorption, refractive index, dielectric constant, relaxation oscillation, Hall constant

ABSTRACT: In view of the discrepancies on the values of the effective mass of the electrons in SnO_2 obtained by different workers, the present authors calculate the effective mass in polycrystalline layers of tin dioxide in the electron density range from 5×10^{17} to $5 \times 10^{20} \text{ cm}^{-3}$. The electron density in the layers was regulated by introducing small amounts of antimony into the layers [2]. The ef-

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ACCESSION NR: AP4043403

fective mass was determined by comparing the optical constants n and k obtained by polarization measurements of reflected light from non-transparent samples in the infrared region, with measurements of the Hall constant of the same samples. The measurements were made in the wavelength range from 1 to 9 microns. The optical constants are determined essentially from the dependence of the dielectric constant on the quantity $(\omega^2 + \nu^2)^{-1}$ (ω -- frequency of incident radiation, ν -- relaxation frequency). The Hall constant is determined by averaging over the principal values of the reciprocal effective mass tensor. The results show that the effective mass increases with increasing electron density and some of the factors that cause this behavior are analyzed. The most reliable values of the effective mass are obtained for an electron density larger than 10^{20} cm^{-3} ; for at lower values it is difficult to account for the various factors. Orig. art. has: 2 figures.

ASSOCIATION: Khar'kovskiy gosudarstvennyy Universitet im. A. M.

Card

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ACCESSION NR: AP4043403

Gor'kogo (Khar'kov State University)

SUBMITTED: 13Dec63

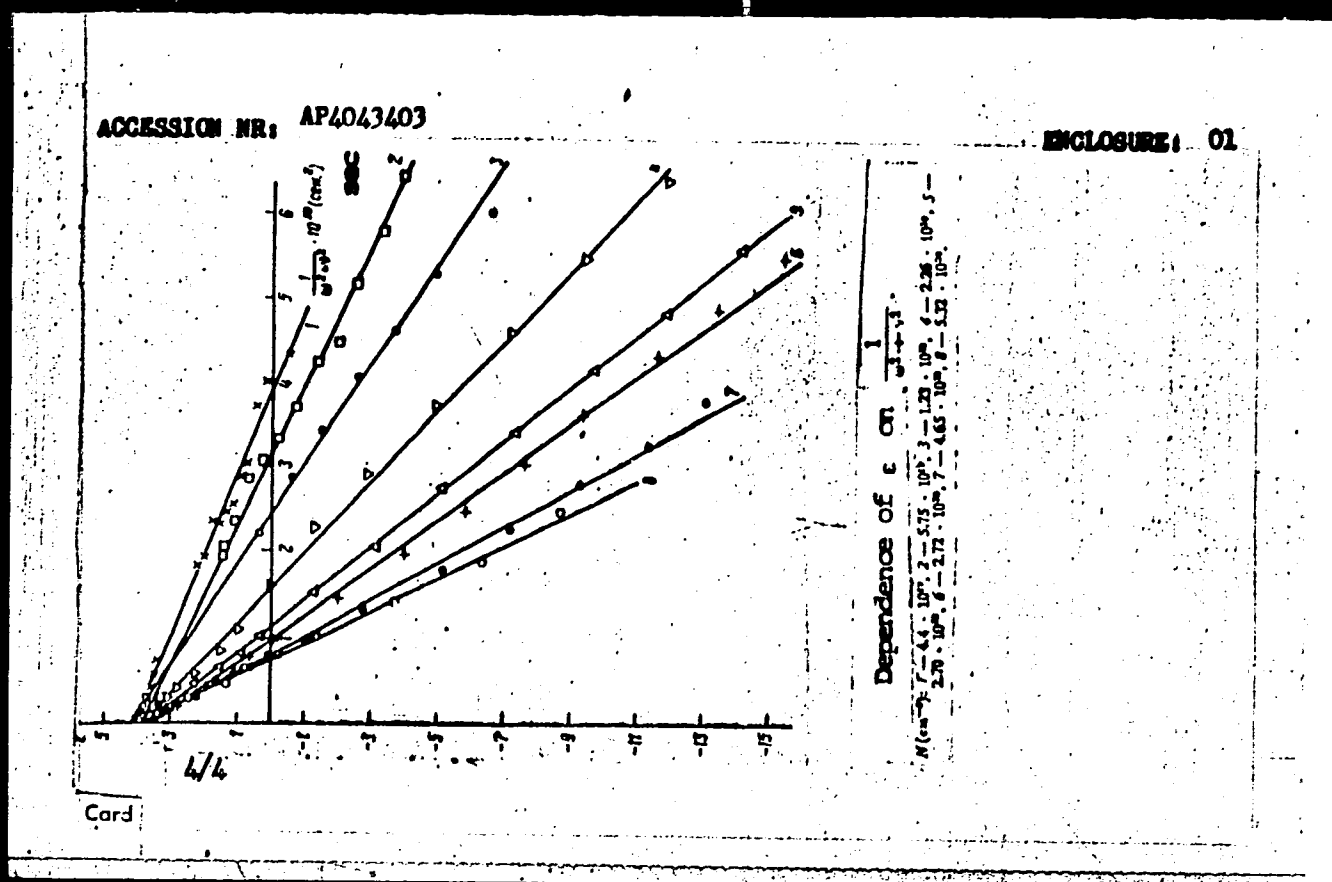
ENCL: 01

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NR REF SOV: 003

OTHER: 003

Card # 3/4



L 8747-65 EWT(1)/EWT(m)/T/EEC(b)-2/EWP(b) IJP(c)/AFWL/ESD(gs)/RAEM(1)/RAEM(t)/
 ESD(dp)/SSD/RAEM(c)/AFETR/BSO/ASD(a)-5/ESD(t) GO/JD
 ACCESSION NR: AP4044853 S/0051/64/017/003/0413/0417

AUTHOR: Miloslavskiy, V. K.

TITLE: Peculiarities of the Faraday effect in thin absorbing films ²¹ ₁₈ ⁸

SOURCE: Optika i spektroskopiya, v. 17, no. 3, 1964, 413-417

TOPIC TAGS: Faraday effect, polarized light, polarization, rotation of vibration plane, magnetic field, thin film, film, light absorption

ABSTRACT: Rotation of the plane of vibration of a light wave transmitted through a thin absorbing film placed in a strong magnetic field is analytically investigated. From a formula for the complex wave amplitude based on Fresnel's transmission and reflection coefficients, an expression is derived for the resultant phase of a wave transmitted through the film with no magnetic field present. From a study of phases corresponding to waves subjected to levorotary and dextrorotary polarization, angles are determined of the rotation of the polarization plane, which occurs when a magnetic

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ACCESSION NR: AP4044853

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field acting in the direction of the wave propagation is switched on. It is shown, that in the case of absorbing films, the total angle of rotation must be the sum of three angles, only one of which defines the shift caused by the passage of the wave through the thickness of the film; to this volume rotation, which is usually held sufficient for Faraday effect measurements, one has to add angles of the surface rotation and interference rotation, the values of which may be quite considerable. It is also demonstrated that volume, surface, and interference effects influence the ellipticity of the polarized light, and formulas are given for its calculation. The author suggests that data on surface rotation may be helpful in studies of physical and chemical surface conditions of matter. "The author thanks L. N. Skhiyarevskiy and R. G. Yarov for discussions of the results." Orig. art. has: 15 formulas.

ASSOCIATION: none

SUBMITTED: 04Nov63

ATD PRESS: 3113

ENCL: 00

SUB CODE: SS, OF

NO REF SOV: 004

OTHER: 002

Card 2/2

BRUSILOVSKIY, Isaak Abramovich; MILOSLAVSKIY, Vilen Naumovich;
BAYEV, Yevg. , red.

[Saki; an historical regional study] Saki; istoriko-
kraevedcheskii ocherk. Simferopol', Krymizdat. 1964.
79 p. (MIRA 17:6)

MILOSLAVSKIY, V. V.

"Etiology and prophylaxis of endemic goiter from the
hygienic point of view."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

MILOSLAVSKIY, V.V., prof. (Kazan')

Endemic goiter. Kaz.med.zhur. 40 no.1:8-13 Ja-P '59.
(MIRA 12:10)

(GOITER)

MILOSLAVSKIY, Ya.I.; ARDAMATSKIY, N.A.; IVANOV, Yu.V.; LIKHVANTSEV,
V.A.; LEGKUN, A.M.; MASLENNIKOVA, A.I.; CHERNYSHEVA, M.I.;
TYUNINA, Ye.A.; SHOLOKHOVA, G.I. (Ryazan')

Urinary excretion of 17-ketosteroids and 17-hydroxy
corticosteroids in healthy people. Probl. endok. i gorm. 9
no.3:76-80 My-Je '63. (MIRA 17:1)

1. Iz kafedry fakul'tetskoy terapii (ispolnyayushchiy
obyazannosti zaveduyushchego - dotsent N.A. Ardamatskiy)
Ryazanskogo meditsinskogo instituta imeni I.P. Pavlova.

CA MILOSLAVSKIY, M-Ya.

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Diethylstilbestrol in roughening of mammary glands in lactation. M. Ya. Miloslavskii and M. D. Sheinerman (Med. Inst., Kharkov). *Akusherstvo i Ginekol.* 1950, No. 2, 35-8. — Peroral use of 5 mg. diethylstilbestrol removes in 24 hrs. the roughening and pain in the mammary glands which are common in the first few days of lactation. A 20-mg. dose is used for retardation of lactation (in 10 2-mg. doses). For stopping lactation 5 daily doses of 2 mg. for 3 days are used. G. M. Koudupoff

MILOSLAVSKIY, Ya. M.

Determination of 17-ketosteroids in urine. Klin. med., Moskva
30 no.3:67-71 Mar 1952. (CML 22:2)

1. Of the Hospital Therapeutic Clinic (Director -- Prof. A. L.
Myasnikov, Active Member of the Academy of Medical Sciences USSR),
First Moscow Order of Lenin Medical Institute.

MILOSLAVSKIY, M.Ya.

Reflex vascular reactions in threatened abortion and their modifications.
produced by verbal stimulation. Akush.i gin. no.2:12-18 Mr-Ap '54.

(MLRA 7:6)

1. Iz Khar'kovskogo nauchno-issledovatel'skogo instituta okhrany materinstva
i mladenchestva im. N.K.Krupskoy (direktor A.I.Kornilova, nauchnyy rukove-
ditel' - doktor meditsinskikh nauk V.I.Konstantinov).
(Abortion) (Blood vessels)

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

Dissertation: "Investigation of the Function of the Suprarenal Cortex in Detecting Corticoids, 17-Ketosteroids and Pregnenolone in Hypertension." Cand Med Sci, First Moscow Order of Lenin Medical Inst, 24 May 54. Vozhemyaya Moskva, Moscow, 14 May 54.

50: SUB 284, 26 Nov 1954

Excretion of 17-keto steroids in the urine in patients with chronic degenerative polyarthritis and its alteration under influence of treatment with cortisone. Ya. M. Miloslavskiy and A. B. Vinogradskiy (1st Moscow Med. Inst.). *Terap. Arkh.* 26, No. 4, 15-23 (1954). — In a majority of polyarthritic cases there is observed a decrease of excretion of 17-keto steroids in the urine. Administration of cortisone leads to an increased elimination of 17-keto steroids within the first few days, then to a gradual decline; in a few cases there is decreased elimination in the first few days. This indicates that cortisone may be in part converted to 17-keto steroids in the organism. It is suggested that in cortisone therapy the administration be not stopped suddenly but be slowly tapered off in order to restore the repressed function of the suprarenal system.

G. M. Kosolapoff

Therap. Therapeut. Clinic

USSR / Human and Animal Physiology (Normal and Pathological). Blood. Blood Pressure. Hypertonia T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97548

Author : Miloslavskiy, Ya. M.

Inst : First Moscow Medical Institute

Title : On the Question of Function of Adrenal Cortex in Hypertension

Orig Pub: Tr. 1-go Mosk. med. in-ta, 1956, I, 74-84

Abstract: In patients with hypertension, excretion of corticoids, 17-ketosteroids, and pregnandiol with urine was studied. Amount of hormones in urine did not noticeably differ from the standard. The author feels that adrenal cortex does not participate in the original increase in arterial pressure by hypertension. --L. S. Nakhutin

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40

SHIFMAN, L. M., MILOSLAVSKIY, M. Ya.

"The Problem of Pathology of the Menopause in Women."

Theses of the Proceedings of the Annual Scientific Sessions 23-26 March 1959
(all-Union Institute of Experimental Endocrinology)

From the Khar'kov Institute of Experimental Endocrinology (Director--Candidate of Medical Sciences S. V. Maksimov; Scientific Director--Professor M. A. Kopelovich) and from the Scientific Research Institute of the Protection of Motherhood and Childhood imeni N. K. Krupskaya (Director--A. I. Kornilova, Candidate of Medical Sciences).

MILOSLAVSKIY, Ya.M.; MILESΛVSKAYA, L.I.; LEONOVA, V.; KAZ'MIN, V.

Effect of certain neurotropic substances on the adrenal cortex.

Report No. 1. Probl. endok. i gorm. 6 no. 3:12-14 My-Je '60.

(MIRA 14:1)

(ADRENAL CORTEX) (PHARMACOLOGY)

SHAPIRO, Ya.Ye.; MILOSLAVSKIY, Ya.M.; CHERNYSHEVA, M.I.; MASLENNIKOVA,
A.I.; TYUNINA, Ye.A.

Treatment of patients with relapsing rheumocarditis by means of
inductothermy (shortwave diathermy) in the adrenal region in
combination with salicylates. Vop. kur., fizioter. i lech. fiz.
kul't. 25 no. 6:508-513 N-D '60. (MIRA 14:2)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. - prof. Ya.Ye.
Shapiro) Ryazanskogo meditsinskogo instituta imeni akademika
I.P. Pavlova.

(RHEUMATIC HEART DISEASE) (DIATHERMY)
(SALICYLATES—THERAPEUTIC USE)

YAKIMCHUK, P.P., kand.med.nauk; MILOSLAVSKIY, Ya.M., kand.med.nauk;
MILOSLAVSKAYA, L.I., kand.med.nauk

Effect of nitrogen dioxide on the adrenal cortex in white rats in
chronic intoxication. Gig.i san. 26 no.12:79-80 D '61.

(MIRA 15:9)

1. Iz kafedry gigiyeny, kafedry fakul'tetskoy terapii Ryazanskogo
meditsinskogo instituta.

(ADRENAL CORTEX) (NITROGEN OXIDES--PHYSIOLOGICAL EFFECT)

MILOSLAVSKIY, Ya.M.; KHUBUTIYA, R.D. (Ryazan')

Consecutive development of hypertension and thyrotoxicosis.
Klin.med. no.1:127-129 '62. (MIRA 15:1)

1. Iz kafedry fakul'tetskoy terapii (zav. - dotsent N.A. Ardamatskiy) Ryazanskogo meditsinskogo instituta.
(THYROID GLAND--DISEASES) (HYPERTENSION)

MITOSLAVSKIY, Ya.M.

Effect of magnesium sulfate, aminazine and hexonium on the
adrenal cortex. Nauch. trudy Riaz. med. inst. 15:71-79 '62.
(MIRA 17:5)

1. Kafedra fakul'tetskoy terapii (zav. kafedroy - prof.
I.B.Likhtsiyer) Ryazanskogo meditsinskogo instituta imeni Pavlova.

ARDAMATSKIY, N.A.; MILOSLAVSKIY, Ya.M.; LIKHVANTSEV, V.A.; LEGKUN, A.M.;
TYUNINA, Ye.A.

Comparative evaluation of the results of studying the content
of sodium and potassium in the plasma, whole blood and erythro-
cytes in some internal diseases. Terap.arkh. 34 no.2:81-85 '62.

(MIRA 15:3)

1. Iz kafedry fakul'tetskoy terapii (i. o. zav. - dotsent N.A.
Ardamatskiy) Ryazanskogo meditsinskogo instituta imeni akad.
I.P. Pavlova.

(SODIUM IN THE BODY) (POTASSIUM IN THE BODY)
(BLOOD—EXAMINATION)

MATSUYEV, I.Ye., prof.; MILOSLAVSKIY, Ya.M., dotsent (Ryazan')

Case of successful surgical treatment of corticosteroma with
Itsenko-Cushing syndrome. Klin.med. 40 no.6:109-112 Je '62.

(MIRA 15:9)

1. Iz kafedr fakul'tetskoy khirurgii (zav. - prof. I.Ye. Matsuyev)
i fakul'tetskoy terapii (zav. - prof. I.B. Likhtsiyer) Ryazan'-
skogo instituta imeni akad. I.P. Pavlova.
(ADRENAL CORTEX—TUMORS) (CUSHING SYNDROME)

MILOSLAVSKIY, Ya.M.; ARDAMATSKIY, N.A. (Ryazan')

Urinary excretion of tetrahydroxy derivatives of corticosteroids
in healthy persons based on paper chromatography data. Probl.
endok. i gorm. 9 no.5:62-66 S-0'63 (MIRA 16:12)

1. Iz kafedry fakul'tetskoy terapii (zav. - prof. I.B.
Likhtsiyer) Ryazanskogo meditsinskogo instituta imeni akademi-
ka I.P.Pavlova.

MILOSLAVSKIY, Ya.M.

Functional status of the adrenal cortex in hypertension.
Kardiologiya 4 no.3:19-27 My-Je '64. (MIRA 18:4)

1. Kafedra fakul'tetskoy terapii (zav. - prof. I.B.Likhtsiyer)
Ryazanskogo meditsinskogo instituta imeni Pavlova i Instit
terapii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof.
A.L.Myasnikov), Moskva.

MILOSLAVSKIY, Ye., inzh.

Why and how? Grashd. av. 17 no. 11:23 N '60. (MIRA 13:12)
(Aeronautics)

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MILOSOVICOVA, H.

BARDOS, V.; BREZINA, R.; HYMPAN, J.; KMETY, E.; KRATOCHVIL, J.; LIBIKOVA, H.;
MICICKA, O.; MILOSOVICOVA, A.; ROSICKY, B.; SOMODSKA, V.

A complex survey of infection foci in Eastern Slovakia in 1953.
Bratisl. lek. listy 34 no.10-11:1166-1195 Oct-Nov 54.

1. Za Zoologického ustavu Vysokej školy polnohosp. v Brne, prednosta
prof. dr. J.Kratochvil, z Virologického ustavu CSAV v Bratislave,
riaditel' akademik D.Blaskovic, z Biologického ustavu CSAV v Prahe,
riaditel akademik I.Malek, z Oblastneho ustavu epidemiologie a
mikrobiologie v Bratislave, riaditel dr. J.Karolcek, z Neurologickej
kliniky PLFSU v Kosiciach, prednosta doc. dr. J.Hympan, z KHEsu v
Kosiciach, riaditel dr. J.Kratochvil, z Hygienickeho ustavu LFSU
v Bratislave, prednosta akademik V.Mucha

(ENCEPHALITIS, EPIDEMIC, epidemiology
in Czech., foci survey in E.Slovakia)
(LEPTOSPIROSIS, epidemiology
in Czech., foci survey in E.Slovakia)

MASAR, I.; MILOSOVICOVA, A.; PUCEKOVA, G.; RODA, J.

Characteristics of the outbreak of infectious hepatitis in
Slovakia in 1961. Cesk. epidem. 12 no.3:145-152 My '63.

1. Odbor SNR pro zdravotnictvo, Bratislava, Krajske hygienicko-
epidemiologicke stanice Kosice, Bratislava, Banska Bystrica.
(HEPATITIS, INFECTIOUS) (GAMMA GLOBULIN)

MITTERMAYER, T.; SCHEIDOVA, L.; TARABCAK, M.; MILOSOVICOVA, A.; ZELENKOVA, V.

Epidemic of Q fever in the Kosice region. Bratisl. lek. listy
44 no.5:288-295 '64.

1. Infekcne oddelenie Fakultnej nemocnice v Kosiciach (veduci:
prim. MUDr. T.Mittermayer), a Krajska hygienocko-epidemiologic-
ka stanica v Kosiciach (riaditel' MUDr.I.Kratochvil).

★

MILOSTANOV, N.N., professor; ARLOZOROV, Z.G., starshiy nauchnyy sotrudnik;
GLENBOTSKAYA, O.V., nauchnyy sotrudnik

Changes in the capillaroscopic picture under the effect of transfusion
of blood and its components. Vop.perel.krovi 4:58-69 '55. (MLRA 9:12)
(BLOOD--TRANSFUSION) (CAPILLARIES)

MILOSTANOV, N.N., professor; KOLYANKO, N.A., kandidat meditsinskikh nauk;
~~SHRAGO~~, M.I., kandidat meditsinskikh nauk

Surgical methods for treating hemorrhages in some diseases of the hemopoietic system (Werlhof disease, thrombophlebitic splenomegaly, giliary cirrhosis). Nov.khir.arkh. no.1:24-29 Ja-F '57. (MLRA 10:6)

1. Adres avtorov: Khar'kov, ul. Chernyshevskogo, d9, Ukrainskiy nauchno-issledovatel'skiy institut perelivaniya krovi i neotlozhaoy khirurgii.
(HEMORRHAGIC DISEASES)

MILOSTANOV, N.N., prof. (Khar'kov)

Collection of "Problems of prevention and treatment of injuries".
Reviewed by N.N.Milostanov. Nov.khir.arkh. no.4:119-121 J1-Ag
'59. (MIRA 12:11)

(WOUNDS AND INJURIES)

MILOSTANOV, H.N., prof.

Brief news. Nov. khir. arkh. no.1:1/2 Ja-F '60. (MIRA 15:2)

1. Predsedatel' konferentsii chitateley zhurnala "Novyy khirurgicheskiy arkhiv" v Khar'kove (II.XII 1959 goda).
(SURGERY...PERIODICALS)

MILOSTANOV, V. N., ass. (Khar'kov, ul. Pushkinskaya, d. 67/69, kv. 14)

Electrocoagulation as a method of choice in the surgical treatment of varicose dilatation of the veins of the lower extremities (further observations). Nov. khir. arkh. no.3:33-38 '62.
(MIRA 15:4)

1. Kafedra fakul'tetskoy i gospi'tal'noy khirurgii (zav. - prof. K. I. Pikin) pediatricheskogo i sanitarno-gigiyenicheskogo fakul'tetov Khar'kovskogo meditsinskogo instituta.

(VARIX) (ELECTROSURGERY)

LEVINA, TS.A., prof.; MILOSTANOVA, V.V. (Odessa)

Tissue therapy in pneumosclerosis and pulmonary emphysema.
Vrach.delo no.2:185-186 P '59. (MIRA 12:6)

1. Kafedra propedevtiki vnutrennikh bolezney (zav. - prof.
TS.A.Levina) Odesskogo meditsinskogo instituta.
(LUNGS--DISEASES) (EMPHYSEMA, PULMONARY) (TISSUE EXTRACTS)

IERMAN, Ivanka, inz.; SULC, Delimir, dr; MILOSTIC, Ivo, inz.

Influence of some pectolytic preparations on the degradation of
pectins, and the depectination and clarification of apple juice.
Kem ind 12 no.3:122-128 Mr . '63.

1. Tehnoloski fakultet, Zagreb, Tvornica "Jedinstvo", Zagreb.

FORETIC, Franjica, inz.; MILOSTIC, Ivo, inz.; BACH, Ivan, dr.

Changes in the pH and the concentration of lactic acid, as well as in the composition of the microflora in the brine of fermented olives. Kem ind 12 no.3:129-135 Mr '63.

1. Tehnoloski fakultet, Zagreb.

ROGINA, B., dr inz.; MILOSTIC, I., inz.; GARBIN, G., inz.

Production of agar from Yugoslav red algae. Kem ind 13
no.3:175-181 '64.

1. Agricultural Faculty, University of Zagreb (for
Rogina). 2. Faculty of Technology, University of Zagreb
(for Milostic and Garbin).

MILOSTIVENKO, S.

With belief in the future. Sov. profsoiuzy no.17:8 S '61.
(MIRA 14:8)

1. Predsedatel' rabocheho komiteta sovkhoza imeni Kalinina,
Pavlovskogo rayona, Krasnodarskogo kraya.
(State farms)

MILOSTNY, V.

"Watch the aluminum-copper connections!"

ELEKTROTECHNIKA, Praha, Czechoslovakia, Vol. 14, No. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified

MAJEWSKA, Janina, mgr; MILOSZ, Alicja

Color determination of aqueous caprolactam solutions by a photo-colorimeter. Chem anal 9 no.2:377-379 '64.

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MILOUN, B.; SORM, F.

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Vol. 20, no. 2, Apr. 1955
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Characteristics of the blood system's reaction and general state
of an animal to oxygen insufficiency in radiation sickness. Trudy
Semipal. med. inst. 2:118-128 '59. (MIRA 15:4)

1. Iz kafedry patologicheskoy fiziologii Semipalatinskogo gosudarstvennogo
meditsinskogo instituta (zav.kafedroy - dotsent T.A.Nazarova, rukovoditel'
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(RADIATION SICKNESS) (ANOXEMIA) (BLOOD)

107-57-1-40/60

AUTHOR: Milov, A. (Kuybyshev)

TITLE: Long-distance TV Reception in Kuybyshev (Dal'niy priyem televizionnykh peredach v g. Kuybysheve)

PERIODICAL: Radio, 1957, Nr 1, p 37 (USSR)

ABSTRACT: The conditions of long-distance TV reception in Kuybyshev change materially from winter to summer. In winter TV reception has been possible only for a few dozen seconds. In summer, programs were received on some days for many hours. The author reports many occasions of receiving "Minsk-1" station and foreign TV programs. Erratic appearance and disappearance of the picture and ghost signals accompanied such receptions. Reception dates and time periods are indicated in the article.

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Card 1/1

MILOV, A.

107-57-5-29/63

AUTHOR: Milov, A. (Kuybyshev)

TITLE: Regular Reception of London TV Broadcasts in Kuybyshev City
(Regulyarnyy priyem londonskikh televizionnykh peredach v g. Kuybysheve)

PERIODICAL: Radio, 1957, Nr 5, p 25 (USSR)

ABSTRACT: Regular dxing of London tv broadcasts on 45 mc in November-December 1956 is described. A 12-element 4-tier antenna tuned to 49 mc and oriented 10-15° to the North from the true London azimuth was used. A type 23LK1B kinescope with 405 lines and vertical frequency 25 was used. Often a multi-outline picture was received. A sharp variation of the signal level was observed at 14 hrs Moscow time when the midday Sun stood in the middle between Kuybyshev and London.

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Card 1/1

MILOV, A., inzhener; GENDML', A., redaktor; STEPANOVA, N., tekhnicheskii
redaktor

[On the road to growth; practices of the casting shop of the Kirov
Machine Building Plant in Minsk] Po puti rosta; iz opyta raboty
liteinogo tsekha Minskogo stankostroitel'nogo zavoda im. Kirova.
Minsk, Gos. izd-vo BSSR, 1956. 25 p. (MIRA 10:1)
(Founding)

ZASTENKER, Grigoriy Semenovich; MILOV, Aleksandr Aleksandrovich;
SVETLOVA, Ye.F., red.; MAYSKAYA, N.I., red.; IL'YUSHENKO-
VA, T.P., tekhn. red.

[Control and output of work at machine accounting centers]
Kontrol' i vypusk rabot na mashinoschetnykh stantsiyakh. Mo-
skva, Gosstatizdat TsSU SSSR, 1961. 95 p. (MIRA 15:3)
(Machine accounting--Study and teaching)

S/137/61/COO/012/035/149
A006/A101

AUTHORS: Kolomitskiy, F.M., Milov, A.I., Ponomarev, V.D.

TITLE: On the solubility of titanium dioxide in potassium fluoro-titanate melts

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 12, 1961, 17, abstract 120124 (Izv. AN KazSSR, Ser. metallurgii, obogashcheniya i ogneporov", 1961, no. 1 (10), 26 - 32, Kaz. summary)

TEXT: The authors studied maximum solubility of TiO_2 in a pure K-fluoro-titanate melt, and in a melt with NaCl admixture. Visual and thermographical methods were used to establish maximum solubility of TiO_2 in K_2TiF_6 which was found to be equal to 7 weight %. The data obtained were employed to plot a constitution diagram of K_2TiF_6 - TiO_2 up to a content of 12.5% TiO_2 . With the aid of petrographical analysis the authors established the solubility of TiO_2 up to 5% in melts of eutectic composition: NaCl - K_2TiF_6 . There are 7 references. ✓

G. Svodtseva

[Abstracter's note: Complete translation]

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S/817/62/005/000/005/012
A006/A101

AUTHORS: Putilin, Yu. M., Ponomarev, V. D., Milov, A. I., Dautova, L. I.

TITLE: Thermographical investigation of the K_2TiF_6 -NaCl- TiO_2 system

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut metallurgii i obogashcheniya. Trudy. v. 5, 1962, Tsvetnaya metallurgiya, 82 - 94

TEXT: Using Kurnakov's thermal method the authors investigated the phase diagram of the K_2TiF_6 -NaCl- TiO_2 system near binary eutectics K_2TiF_6 -NaCl and K_2TiF_6 - TiO_2 . Batches of these substances were mixed, remelted and heated in platinum crucibles or blocks placed in a pyrometrical apparatus. After thermographical inspection thermograms of 78 compositions were taken. On the basis of results obtained from thermographical, roentgenostructural and crystallographical analyses a phase diagram of the system and phase diagrams of the binary systems were plotted. A spatial diagram of the system in the investigated range is presented and described. Polythermic cross-sections of the system are given at a constant 1-, 2-, 3- and 4-% content of titanium dioxide. A fusibility diagram

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Thermographical investigation of the...

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A006/A101

of the system is plotted on the concentration triangle and the boundaries of lamination zones are determined (Figure 13). The behavior of the basic component of the alloys - potassium fluorotitanate - was analyzed. On the basis of previous data, obtained by Kolomitskiy, Milov, Ponomarev and Putilin, it is assumed that this component is present in three polymorphous forms. For pure potassium fluorotitanate the following modifications are to be considered: δ - stable in a range from room temperature to 380°C ; γ - stable in a $280 - 640^{\circ}\text{C}$ range; β - stable at temperature over 640°C . Starting from 680°C noticeable dissociation begins. Full melting takes place at about 850°C . There are 17 figures and 1 table. ✓

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